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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,335	05/31/2001	Douglas B. Quine	F-182 -	9597

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EXAMINER
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COSIMANO, EDWARD R

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding..

## Office Action Summary

**Application No.**

09/871,335

**Applicant(s)**

QUINE, DOUGLAS B.

**Examiner**

Edward R. Cosimano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Applicant should note the changes to patent practice and procedure:
  - A) effective December 01, 1997 as published in the Federal Register, Vol 62, No. 197, Friday October 10, 1997;
  - B) effective November 07, 2000 as published in the Federal Register, Vol 65, No. 54603, September 08, 2000; and
  - C) Amendment in revised format, Vol. 1267 of the Official Gazette published February 25, 2003.
2. The specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification or drawings. Applicant should note the requirements of 37 CFR § 1.52, 37 CFR § 1.74, § 1.75, § 1.84(o,p(5)), § 1.121(a)-1.121(f) & § 1.121(h)-1.121(i).
3. Claims 1-7 & 9-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - 3.1 In regard to claims 1-7, although one of ordinary skill at the time of the invention would know how to accomplish each of the individual recited actions/functions from the language of these claims, since, there is no clear and definite interconnection between one or more of the recited limitations of these claims, one of ordinary skill could not determine from the language of these claims whether or not they are in fact making and/or using the claimed invention. In this regard it is noted that from the language of these claims it is vague, indefinite and unclear:
    - A) in regard to claim 1 and why are the "plurality of computer input means" claimed since the invention as recited in this claim does not make use of the "plurality of computer input means".
    - B) in regard to claim 1 and under what circumstance is the recited "feedback signal" generated, since the invention as recited in this claim does not set forth or indicate what type of "feedback" is being generated.

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3.2 Since claim 8 recites a "mail processing system" applicant reference to "the apparatus of claim 8" in each of claims 9-15 is confusing. Hence the word "apparatus" at line 1 of claims 9-15 should be --system--, so as to be consistent with claim 8.

3.3 Claims not specifically mentioned above, inherit the defects of the base claim through dependency. For the above reason(s), applicant has failed to particularly point out what is regarded as the invention.

4. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

4.1 Claims 1-28 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter.

4.1.1 The instant claims recite a system, (claims 1-15), and a method comprising a series of steps to be performed, (claims 16-28), which have a disclosed practical application in the technological or useful arts. Further, the instant claims do not merely define either a computer program, a data structure, non-functional descriptive material, (i.e. mere data) or a natural phenomenon.

4.1.2 In regard to claims 1-28, the invention as set forth in these claims merely describes:

A) in regard to claims 1-7, a system that uses sensors to collect data that is used to generate a feedback signal that is communicated to the user.

B) in regard to claims 8-15, a system that uses sensors to collect data that is collected by a computer and compared to a database so as to generate feedback signals that are communicated to the user.

C) in regard to claims 16-28, a method in which sensors are used to monitor system parameters and then compared by a computer and compared to a reference value from a database to determine a mismatch and to generate an output that is communicated to the user.

However, the process/system/manufacture as recited in these claims does not require the result of either the claim as a whole or the manipulations of data as recited in these claims be applied

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in any manner so as to be tangibly used in a concrete manner and hence to produce a useful concrete and tangible result, that is a concrete and tangible application with in the technological or useful arts.

4.1.3 It is further noted that applicant has not recited in these claims a specific process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, which is either:

- A) altered or changed or modified by the invention recited in claims; or
- B) utilizes the result of the invention recited in these claims; or
- C) is operated or controlled by the result of the invention recited in these claims.

4.1.4 It is further noted in regard to claims 1-28, that as claimed applicant has not claimed:

A) pre computer processing, since the claims fail to recited that the data, which originates from an unknown source, is manipulated or transformed/changed before it is processed by the claimed invention; or

B) post computer processing, since the claims fail to recited that the data which represents the result of the claimed manipulation, is neither manipulated nor used nor changed by any device after it has been processed by the claimed invention; or

C) a practical use of the claimed invention by any physical system or device or method outside of the claimed invention other than a statement of the intended use of the claimed invention; or

D) process steps or physical acts/operations by the claimed invention that would affect the internal operation of a computer/machine as were found to be statutory in either In re McIlroy 170 USPQ 31 (CCPA, 1971) or In re Waldbaum 173 USPQ 430 (CCPA, 1972); or

E) process steps or physical acts/operations by the claimed invention that would be considered as going beyond the manipulation of "abstract ideas" as were found to be non-statutory in In re Warmerdam 31 USPQ2d 1754 (CAFC, 1994); or

F) a concrete and tangible practical application of either:

- (1) the invention as a whole; or

(2) the final results of the manipulations/actions with in the technological or useful arts;

note In re Sarkar 200 USPQ 132 (CCPA, 1978) where the process step of “constructing said obstruction within the actual open channel at the specified adjusted location indicated by the mathematical model” was held to be so tenuous connected to the remaining process steps as to not be a process with in the scope of 35 U.S.C. § 101.

Hence, the invention of claims 1-28 is merely directed to an hypothetical mental exercise that manipulates an abstract idea of manipulating collected data with out requiring that the results of the manipulation be used and hence is with out a claimed concrete and tangible practical application of the abstract idea, (note In re Beauregard 35 USPQ2d 1383 (CAFC 1995) and the associated claims of U.S. Patent 5,710,578; and State Street Bank & Trust Co. v. Signature Financial Group Inc. 47 USPQ2d 1596 (CAFC 1998)).

4.1.5 It is further noted that the type/nature of either the data or the calculated numbers does not affect the operation of the claimed invention and hence are considered to be non function descriptive material, (note In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983)).

4.1.6 In practical terms, claims define nonstatutory processes if they:

A) consist solely of mathematical operations without some claimed practical application (i.e., executing a “mathematical algorithm”); or

B) simply manipulate abstract ideas, e.g., a bid (Schrader, 22 F.3d at 293-94, 30 USPQ2d at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759),

without some claimed practical application of the mathematics or abstract idea.

4.1.7 In view of the above analysis claims 1-28, as a whole, are directed to an hypothetical mental exercise that merely manipulates mathematics or an abstract idea without a claimed concrete and tangible practical application of the mathematics or abstract idea, and hence are directed to non-statutory subject matter.

4.2 Claims 1-7 & 9-15 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter.

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4.2.1 As set forth by the Court in:

A) In re Musgrave 167 USPQ 280 at 289-290 (CCPA 1970), “We cannot agree with the Board that these claims (all the steps of which can be carried out by the disclosed apparatus) are directed to non-statutory processes merely because some or all of the steps therein can also be carried out in or with the aid of the human mind or because it may be necessary for one performing the process to think. All that is necessary, in our view, to make a sequence of operational steps a statutory “process” within 35 U.S.C. 101 is that it be in the technological arts so as to be in consonance with the Constitutional purpose to promote the progress of “useful arts.” Cons. Art. 1, sec. 8.”, {emphasis added}; and

B) In re Sarkar 100 USPQ 132 @ 136-137 (CCPA 1978), echoing the Board of Appeals stated in regard to claim 14 “14. A method of locating an obstruction in an open channel to affect flow in a predetermined manner comprising:

a) obtaining the dimensions of said obstruction which affect the parameters of flow;

b) constructing a mathematical model of at least that portion of the open channel in which said obstruction is to be located in accordance with the method of claim 1 using those dimensions obtained in step (a) above;

c) adjusting the location of said obstruction within said mathematical model until the desired effect upon flow is obtained in said model; and thereafter

d) constructing said obstruction within the actual open channel at the specified adjusted location indicated by the mathematical model.”;

and “Concerning claims 14-39 and the significance of “post-solution activity,” like building a bridge or dam, the board concluded: While it is true that the final step in each of these claims makes reference to the mathematical result achieved

by performing the prior recited steps, we consider the connection to be so tenuous that the several steps recited in each claim when considered as a whole do not constitute a proper method under the statute.”, {emphasis added}.

4.2.2 Further, it is noted in regard to claims 14-39 of Sarkar, although step (d) of claim 14 of Sarkar references the result of step (c) of claim 14 of Sarkar it is clear from the language of step (c) of claim 14 of Sarkar that multiple adjustments to the location of the obstruction are required to be made until a location with the desired effect has been determined. Hence, the reference to constructing the obstruction at the “specified adjusted location” in step (d) of claim 14 of Sarkar is vague, indefinite and unclear in regard to which one of the possible multiple adjusted locations of the obstruction that were used during step (c) of claim 14 of Sarkar would be used when constructing the obstruction as required by step (d) of Sarkar. Therefore, without a clear connection between step (d) of Sarkar and the remaining steps of claim 14 of Sarkar, the Board of Appeals and the Court held that these claims were not a process within the meaning of process as used in 35 U.S.C. § 101 and hence were directed to non-statutory subject matter.

4.2.3 As can be seen from claims 1-7 & 9-15, these claims are directed to a series of devices for performing various functions or steps/actions/functions, which as set forth above in regard to the rejection of claims 1-7 & 9-15 under 35 U.S.C. § 112 2<sup>nd</sup> paragraph, are not clearly and definitely interconnected to one another and therefore do not provide an operative useful machine/system or method/process within the meaning of machine or process as used in 35 U.S.C. § 101.

4.3 Claims 1-28 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter, since:

A) in regard to claims 1-7 & 9-15, these claims fail to comply with the “requirements this title, namely 35 U.S.C. § 112 2<sup>nd</sup> paragraph as set forth above.

B) in regard to claims 1-28, these claims fail to comply with the “requirements this title, namely 35 U.S.C. § 102 as set forth below.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:



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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.1 Claims 1-20 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Yamazaki et al (JP 03-13474) or Hunter (5,243,654) or Brookner (5,457,642).

5.1.1 In regard to claims 1-20, Yamazaki et al ('474) discloses a computer implemented system and method of maintenance monitoring. The system and method of Yamazaki et al ('474) under the control of various computer systems with operating program stored in the memory controls various sensors to monitor and collect operating data on a device. The monitored data is sent to a remote computer that compares the data to stored thresholds for each component of the monitored system. When the monitored data is no longer is within in a predetermined relationship with the associated threshold, then there is a mismatch and a warning signal is generated and communicated to a maintenance person for notified.

5.1.2 In regard to claims 1-20 discloses a computer implemented system and method of maintenance monitoring. The system and method of either Hunter ('654) or Brookner (5,457,642 under the control of various computer systems with operating program stored in the memory uses a sensor to monitor the interval between contacts with a remote data center. The monitored data is exceeds a stored threshold, the system is locked from further franking operations until operating data has been communicated to a data center and an unlock code has been entered into and accepted by the postage meter. sent to a remote computer that compares the data to stored thresholds for each component of the monitored system. When the monitored data is no longer is within in a predetermined relationship with the associated threshold, then there is a mismatch and a warning signal is generated and communicated to a maintenance person for notified.

6. The examiner has cited prior art of interest, for example:

A) Le Carpentier (4,752,950) discloses the remote monitoring of franking devices by the collection of operation related data for each of the franking system connected to a communications network.

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B) Storace (4,811,234) discloses the remotely monitoring the operation of franking devices by the collection of operation related data concerning how fast postage is being dispensed by each postage meter connected to a communications network.

C) Park (GB 2301688) which discloses that the maintenance interval for a device may be monitored by counting the number of operations, comparing the accumulated number to an associated value that has been stored and providing a warning to the user when the accumulated number is greater than the stored value.

D) Tanaka (JP 11-277765) which discloses that the maintenance interval for a device may be monitored by counting the number of operations, comparing the accumulated number to an associated value that has been stored and inhibiting further operation of the monitored device when the accumulated number is greater than the stored value.

E) Brookner (6,098,032) which discloses monitoring the performance of a device over a period of time to detect change that would indicate that maintenance is required.

7. The shortened statutory period of response is set to expire 3 (three) months from the mailing date of this Office action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Cosimano whose telephone number is (703) 305-9783. The examiner can normally be reached Monday through Thursday from 7:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss, can be reached on (703)-308-2702. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

8.1 The fax phone number for UNOFFICIAL/DRAFT FAXES is (703) 746-7240.

8.2 The fax phone number for OFFICIAL FAXES is (703) 872-9306.

8.3 The fax phone number for AFTER FINAL FAXES is (703) 872-9306.

02/06/05



**Edward R. Cosimano**  
**Primary Examiner A.U. 3629**